

## **REMARKS**

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-23 are now pending in this application.

### **Information Disclosure Statement**

Applicants wish to thank the Office for providing a signed and initialed copy of the SB/08 form provided with the Information Disclosure Statement filed on September 8, 2005. Applicants note that an Information Disclosure Statement and SB/08 form were also filed on August 19, 2005. Applicants respectfully request a signed and initialed copy of this SB/08 form with the next Office correspondence.

### **Rejections under 35 U.S.C. § 103**

Claims 1, 3, 5, 7, 9, and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,869,849 (hereafter "Jou et al.") in view of U.S. Pub. No. 2002/0104997 (hereafter "Kuo et al."). This rejection is respectfully traversed.

Amended claim 1 recites a light emitting diode that includes a semiconductor substrate, a light-emitting region including an active layer, a transparent conductive film, a first electrode, a second electrode, a layer for preventing exfoliation of the transparent conductive film, and "an undoped layer or a low carrier concentration layer formed between the active layer and the second conductivity type cladding layer, wherein the undoped layer or the low carrier concentration layer is a layer other than the active layer and comprises a bandgap greater than the active layer."

Jou et al. discloses a light emitting diode. However, as noted by the Office, Jou et al. does “...*not necessarily teach* the limitation ‘and an undoped layer or layer of low carrier concentration formed between the active layer and the second conductivity type cladding layer.’” See Office Action at page 3. Kuo et al. discloses a light emitting diode that includes a multiple quantum well (MQW) active layer 212. See Kuo et al. at paragraph 0038. However, Kuo et al. does not disclose, teach, or suggest an undoped layer or low carrier concentration layer that “is a layer other than the active layer” because the MWQ layers disclosed by Kuo et al. are the active layers. Nor does Kuo et al. disclose, teach, or suggest an undoped layer or low carrier concentration layer “comprising a bandgap greater than the active layer.” Therefore, it would not have been obvious to one of ordinary skill in the art at the time that the Applicants’ invention was made to modify the light emitting diode disclosed by Jou et al. by the teachings of Kuo et al. to make the light emitting diode of claim 1. Nor would one of ordinary skill in the art have been motivated to make such a modification.

The Office argues that it would have been obvious to one of skill in the art to provide “more than one active layer.” See Office Action at page 4. However, the Office has not provided a basis in the prior art, such as a teaching in Jou et al. and/or Kuo et al., for providing more than one active layer. Nor has the Office explained why one of skill would have been motivated to undertake such a modification.

For at least the reasons noted above, withdrawal of this rejection is respectfully requested.

Claims 2, 4, 6, 8, and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jou et al. and Kuo et al. as applied to claim 1, and further in view of U.S. Patent No. 6,495,862 (hereafter “Okazaki et al.”) and U.S. Pub. No. 2005/0095768 (hereafter “Tsuda et al.”). Okazaki et al. and Tsuda et al. fail to remedy the deficiencies of Jou et al. and Kuo et al. Withdrawal of this rejection is respectfully requested.

Claims 11 and 19-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jou et al. and Kuo et al. as applied to claim 1, and further in view of Journal of Applied

Physics 51(6), 3269-3272 (1980) (hereafter "Temkin"). Temkin fails to remedy the deficiencies of Jou et al. and Kuo et al. Withdrawal of this rejection is respectfully requested.

Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jou et al. and Kuo et al. as applied to claim 1, and further in view of Okazaki et al. and Tsuda et al. Okazaki et al. and Tsuda et al. fail to remedy the deficiencies of Jou et al. and Kuo et al. Withdrawal of this rejection is respectfully requested.

Claim 13 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jou et al., Kuo et al., and Temkin as applied to claim 11 above, and further in view of Okazaki et al. and Tsuda et al. Okazaki et al. and Tsuda et al. fail to remedy the deficiencies of Jou et al. and Kuo et al. Withdrawal of this rejection is respectfully requested.

Claims 14 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jou et al. and Kuo et al. as applied to claim 1, and further in view of Okazaki et al. Okazaki et al. fails to remedy the deficiencies of Jou et al. and Kuo et al. Withdrawal of this rejection is respectfully requested.

Claims 15 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jou et al., Kuo et al., and Temkin as applied to claim 11 above, and further in view of Okazaki et al. Okazaki et al. fails to remedy the deficiencies of Jou et al., Kuo et al., and Temkin. Withdrawal of this rejection is respectfully requested.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to

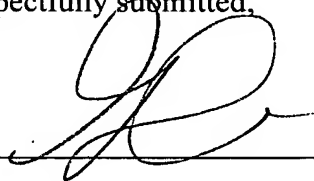
Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date

1/23/06

By



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